

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): Method for producing thermal energy from small-grained oilseeds, ~~preferably from rapeseed, characterized in that the~~ wherein a combustion space (2) of a combustion chamber (1) is first preheated to a temperature between 500° C and 1250° C, and ~~that~~ unreduced seeds as well as combustion air are fed into ~~this the~~ combustion space (2) in controlled amounts, ~~after which thereafter~~ preheating is discontinued, and a pressure of at least 2 bar is maintained in the combustion space, whereby ~~the seeds~~ subsequently fed in seeds burn explosively, and ~~the a~~ resulting flame exits through a flame exit opening (9).

Claim 2 (currently amended): Method according to Claim 1, ~~characterized in that~~ wherein the temperature in the combustion space (2) of combustion chamber (1) is preheated to a temperature between 500° C and 1250° C, preferably to a temperature of is about 1000° C 1000° C.

Claim 3 (currently amended): Method according to Claim 1, ~~characterized in that~~ including maintaining a pressure between 2 bar and 13 bar ~~is maintained in the~~ combustion space (2) ~~of combustion chamber (1)~~.

Claim 4 (currently amended): Method according to Claim 1, ~~characterized in that~~ including feeding the oilseeds are fed into combustion chamber (1) individually and in succession into the combustion chamber.

Claim 5 (currently amended): Method according to Claim 1, ~~characterized in that~~ including forcing the oilseeds to perform a spiral movement in at least one section of the combustion space, ~~the fed in oilseeds are forced to perform a spiral movement~~.

Claim 6 (currently amended): Method according to Claim 1, ~~characterized in that~~ the including varying a volume of the combustion space ~~is variable~~.

Claim 7 (currently amended): Arrangement for ~~implementing the method according to Claim 1, characterized by producing thermal energy from small-grained oilseeds in a continuous process comprising~~ a combustion chamber (1) with a combustion space (2) in which a disconnectible preheating device (8) ~~such as an oil burner~~ is provided, and into which lead a feed line (3) for feeding in the oilseeds and at least one combustion air supply line (6), and which is provided with a flame exit opening (9), ~~whereby and devices in the feed line, the at least one combustion air supply line and the flame exit opening for maintaining a pressure of at least 2 bar in the combustion space (2) are provided.~~

Claim 8 (cancelled)

Claim 9 (currently amended): Arrangement according to ~~claim~~ Claim 7, ~~characterized in that including~~ a controllable proportioning device (5) ~~is provided~~ in the feed line (3) for feeding in the oilseeds.

Claim 10 (currently amended): Arrangement according to Claim 7, ~~characterized in that wherein~~ the combustion space (2) ~~consists of~~ comprises an interior tube (11) and an exterior casing (12) surrounding said interior tube (11) with clearance and communicating with said interior tube (11).

Claim 11 (currently amended): Arrangement according to Claim 10, ~~characterized in that wherein~~ the feed line (3) leads into the interior tube (11) in which the disconnectible preheating device (8) is ~~arranged~~, arranged and that the flame exit opening (9) is provided in the exterior casing (12).

Claim 12 (currently amended): Arrangement according to Claim 10, ~~characterized in that wherein~~ the interior tube includes an interior wall ~~of interior tube (11) is provided~~ with a spiral recess (13) and that ~~wherein~~ the feed line (3) ~~preferably~~ leads tangentially into the interior tube (11).

Claim 13 (currently amended): Arrangement according to Claim 10, ~~characterized in that a wall of wherein~~ the exterior casing (12), ~~preferably includes an adjustable end wall extending across the an axis of the interior tube, is adjustable.~~

Claim 14 (currently amended): Arrangement according to Claim 13;
~~characterized in that~~ wherein a wall of the exterior casing (12) ~~is designed as~~ comprises a plate
(20) that can be moved, ~~preferably~~ by means of an electrical actuator.

Claim 15 (currently amended): Arrangement according to ~~claim~~ Claim 7;
~~characterized in that~~ including at least one combustion air supply line (6) ~~leads~~ leading
tangentially into the interior tube (11), ~~preferably tangentially~~.

Claim 16 (currently amended): Arrangement according to Claim 15;
~~characterized in that~~ including another combustion air supply line (19), for the delivery of
secondary air, ~~leads~~ leading into ~~the~~ a space (16) surrounded by the exterior casing (12).

Claim 17 (currently amended): Arrangement according to ~~claim~~ Claim 7;
~~characterized in that in~~ including a controllable blower coupled to the at least one combustion air
supply line (6), ~~a controllable blower (7) is provided~~.

Claim 18 (currently amended): Arrangement according to Claim 9, ~~characterized~~
~~in that~~ wherein the flame exit opening (9) ~~is designed as~~ comprises a Venturi nozzle.

Claim 19 (currently amended): Arrangement according to Claim 18;
~~characterized in that~~ wherein the flame exit opening (9) ~~is designed as~~ comprises a multi-stage
Venturi nozzle, ~~with~~ and an afterburner device provided between ~~the~~ different stages of the
Venturi nozzle.

Claim 20 (currently amended): Arrangement according to Claim 8, ~~characterized~~
~~in that~~ including at least one throttle (18) ~~is provided~~ in the flame exit opening (9) ~~which is~~
~~preferably designed~~ configured as a pipe end (17).

Claim 21 (currently amended): Arrangement according to Claim 8, ~~characterized~~
~~in that~~ wherein the flame exit opening (9) ~~is designed~~ configured as a labyrinth.

Claim 22 (currently amended): Arrangement according to Claim 7, ~~characterized~~
~~in that~~ wherein the combustion chamber (1) ~~with~~ and the combustion space (2), ~~in particular the~~

are defined by an interior tube (11) and the an exterior casing (12) surrounding same, are the tube and made of a fire resistant, preferably ceramic material.

Claim 22 ~~23~~ (currently amended): Arrangement according to Claim 7;
~~characterized in that~~ including a cooling jacket surrounding the combustion space (2) ~~is surrounded by a cooling jacket (10).~~

Claim 24 (new): Method for producing thermal energy from small-grained oilseeds wherein a combustion space of a combustion chamber is first preheated and unreduced seeds as well as combustion air are fed into the combustion space in controlled amounts, thereafter preheating is discontinued and a pressure of at least 2 bar is maintained in the combustion space, whereby subsequently fed in seeds burn explosively, and a resulting flame exits through a flame exit opening, and wherein in at least one section of the combustion space the fed-in oilseeds are forced to perform a spiral movement.

Claim 25 (new): Method for producing thermal energy from small-grained oilseeds wherein a combustion space of a combustion chamber is first preheated and unreduced seeds as well as combustion air are fed into the combustion space in controlled amounts, thereafter preheating is discontinued and a pressure of at least 2 bar is maintained in the combustion space, whereby subsequently fed in seeds burn explosively, and a resulting flame exits through a flame exit opening, and wherein a volume of the combustion space is variable.

Claim 26 (new): Arrangement for producing thermal energy from small-grained oilseeds comprising a combustion chamber with a combustion space in which a disconnectible preheating device is provided, and into which lead a feed line for feeding in the oilseeds and at least one combustion air supply line, and which is provided with a flame exit opening, devices for maintaining a pressure in the combustion space, the combustion space comprising an interior tube, and an exterior casing surrounding the interior tube with clearance and communicating with the interior tube.

Claim 27 (new): Arrangement for producing thermal energy from small-grained oilseeds comprising a combustion chamber with a combustion space in which a disconnectible

preheating device is provided, and into which lead a feed line for feeding in the oilseeds and at least one combustion air supply line, and which is provided with a flame exit opening, devices for maintaining a pressure in the combustion space, the combustion space comprising an interior tube and an exterior casing surrounding and communicating with the interior tube, and at least one combustion air supply line leading into the interior tube.

Claim 28 (new): Arrangement for producing thermal energy from small-grained oilseeds comprising a combustion chamber with a combustion space in which a disconnectible preheating device is provided, and into which lead a feed line for feeding in the oilseeds and at least one combustion air supply line, and which is provided with a flame exit opening, devices for maintaining a pressure in the combustion space, and at least one throttle in the flame exit opening which is designed as a pipe end.